

PHENIX WEEKLY PLANNING

9/6/2007

Don Lynch

2007 Summer Shutdown Schedule

<u>Item</u>	<u>Start</u>	<u>Complete</u>
RPC Factory set up	in progress	9/28
HBD West repair	in progress	9/28?
MPC South upgrade/ bench tests	in progress	9/20
MuTr Capacitor Decap	in progress	9/30
Work Platform documentation	in progress	9/7
MuTr FEE Prototype (wp done)	in progress	9/20
Reinstall MPC North (wp done)	in progress	9/20
Neutron shield support design & install.	In progress	9/30
BBC Maintenance	None required this year	
Repair RXNP Phototube	Done	Done
EC/EmCal survey	9/5	9/30
Move CM North	9/20	9/21
Install CM access ladder (wp needed)	9/21	9/30
Reinstall MPC South	9/24	9/28

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2007 Summer Shutdown Schedule (cont'd)

Remove HBD East	9/30?	10/7?
HBD Pre survey at SB	9/23?	9/30?
HBD West Mechanical/Gas Reinstall	9/30?	10/7?
HBD EAST Mechanical/Gas Reinstall	11/15?	11/28?
HBD Electrical Reinstall	10/7?	12/15?
HBD installation survey	10/1?	12/22?
Reinstall MMS East Vert. Lampshade	10/1	10/5
EC Roll In	10/8	10/10
C-A fold scaffolding	10/8	10/8
Move MuID collars to IR	10/9	10/9
Roll in-to IR and North to run pos.	10/10	10/11
PHENIX techs reconnect water, elect., gas, fibers	10/12	10/19
InstaCarpenters restore scaffolding, Re-install lift & ladder, re-connect gas sniffers	10/12	10/19
Mike Rau re-install lift wiring, Re-connect TOF blower	10/12	10/19
DC East repair	10/12	10/19
HBD/MPC/Other TBD Commissioning	10/1	10/31
Start of Run 8	11/1	11/1

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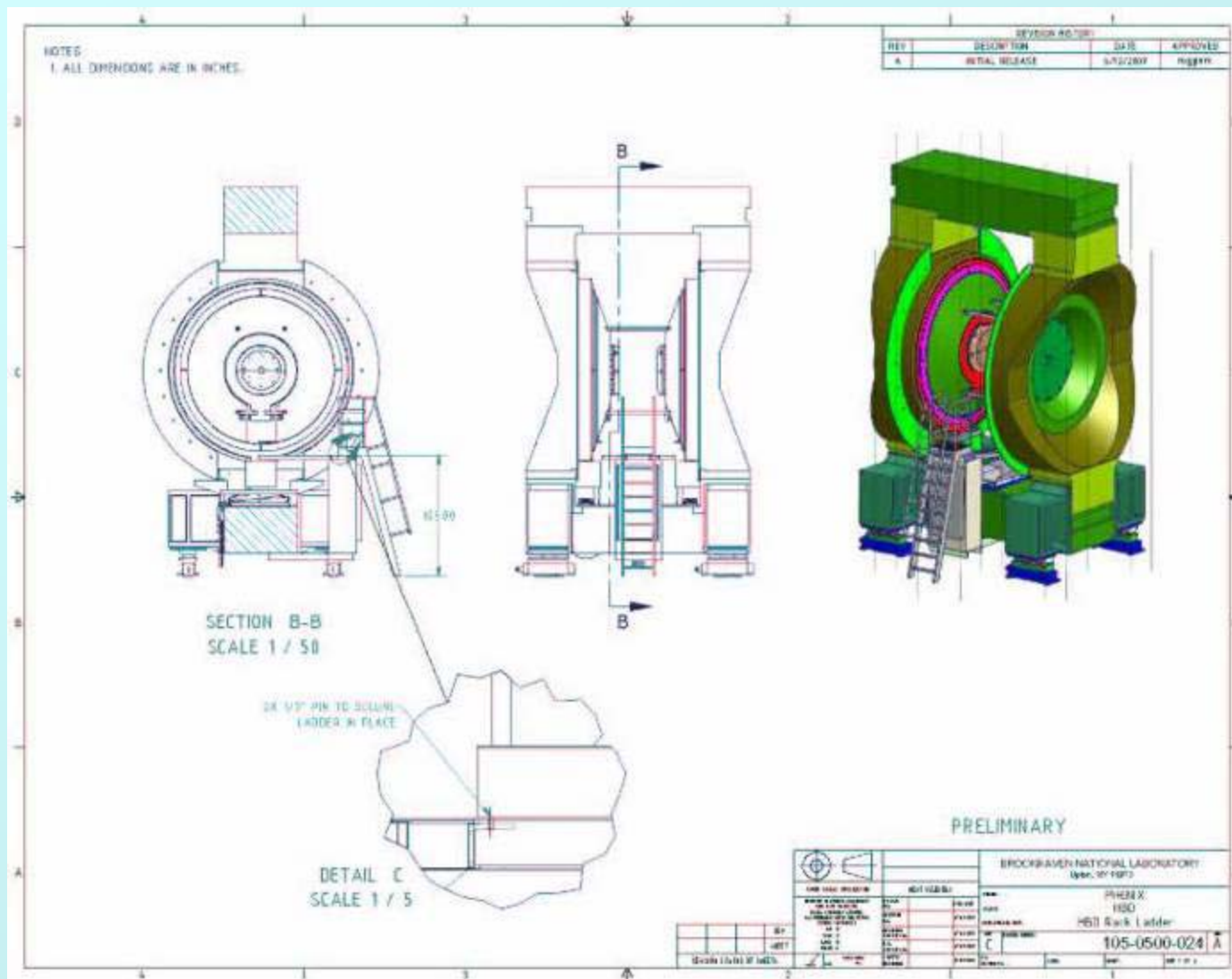
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CM Ladder/Stair Shutdown Access

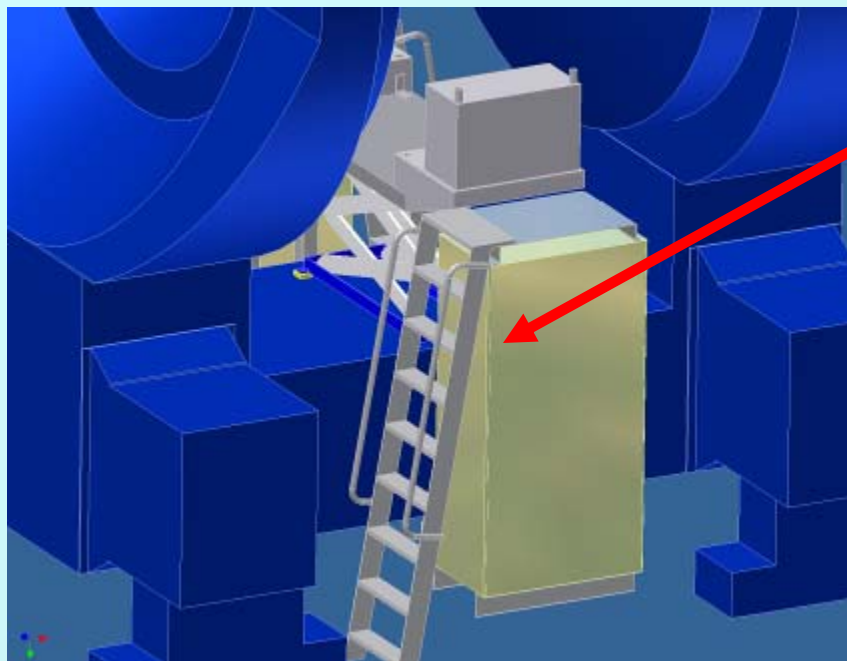
TECHNICAL SUPPORT NOON



- PO pinned
Waiting for
delivery
- Delivery ~9/21

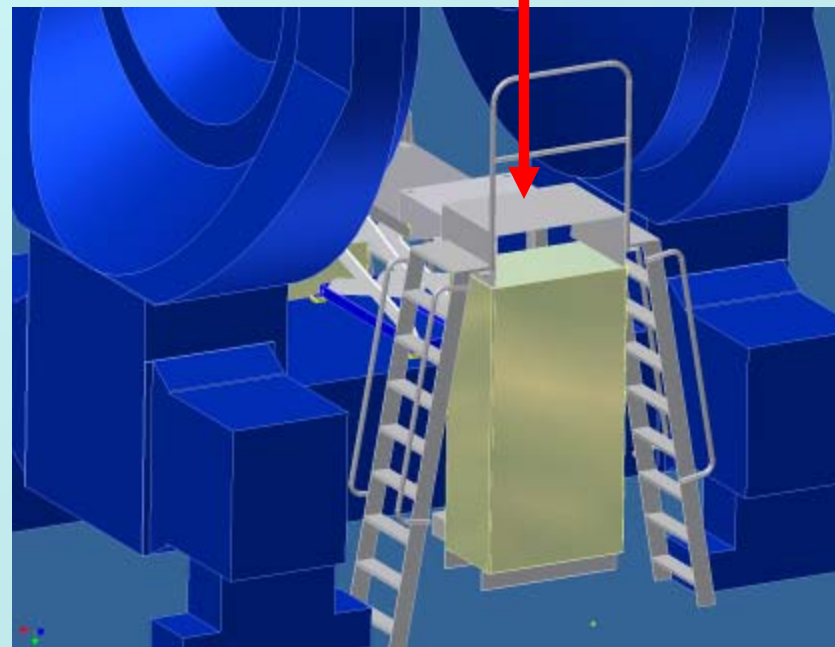
CM Ladder/Stair Run Access

TECHNICAL SUPPORT 2007



East access

West access

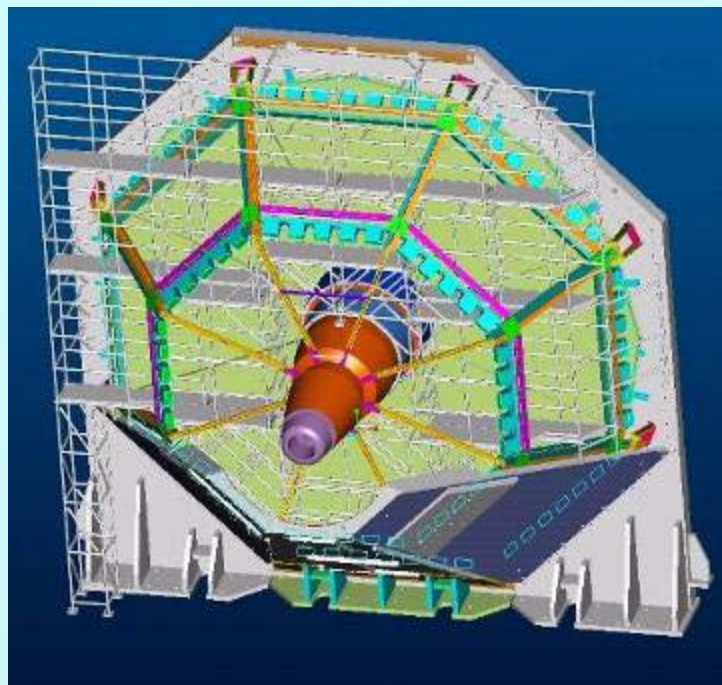


Features:

- ~70 deg. Alum ships ladder
- (1 or 2) lifts off to store vertically for run and/or to access rack doors.
- Step up platform above rack and cables.

- Can be used on either east or west side
- Hand rails on ladders. Safety rail on platform

Station 1 , 2, 3 access plan

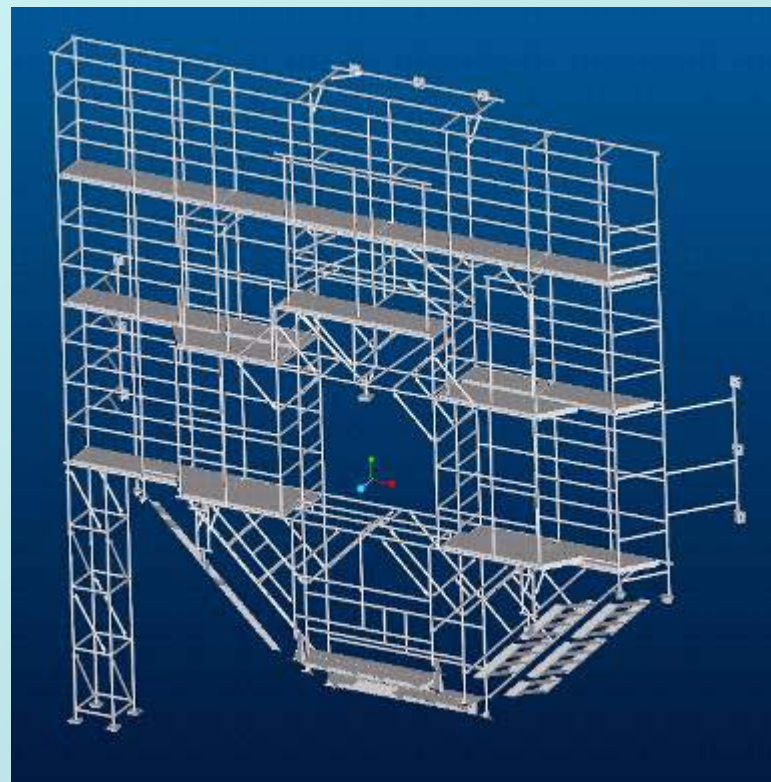


Use existing MMN scaffolding components

Sta. 1: modify to adapt to rails

Sta 2N & 3N: Internal to MMN only.
Adapt to work with most lampshades on.

Sta 2S & 3S: TBD



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RPC Factory

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Work is continuing. Please make sure that all work in 912 is properly planned and approved.

9/6/2007

Weekly Planning Meeting

RPC Factory Issues

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A. Factory Set Up:

1. PHENIX tech support:

Gas: John T.

Elect: Frank T.

Mech: Kenny J.

2. Electrical work moving complete ~9/5.

3. floor to be painted after elec. In progress

4. HVAC specs 18,000 BTU AC (not ordered yet) 4 HEPA filters, internally recirculated (done)

5. Gas distribution design in progress start installing next week

B. Safety Issues: Per Yousef's Minutes from review

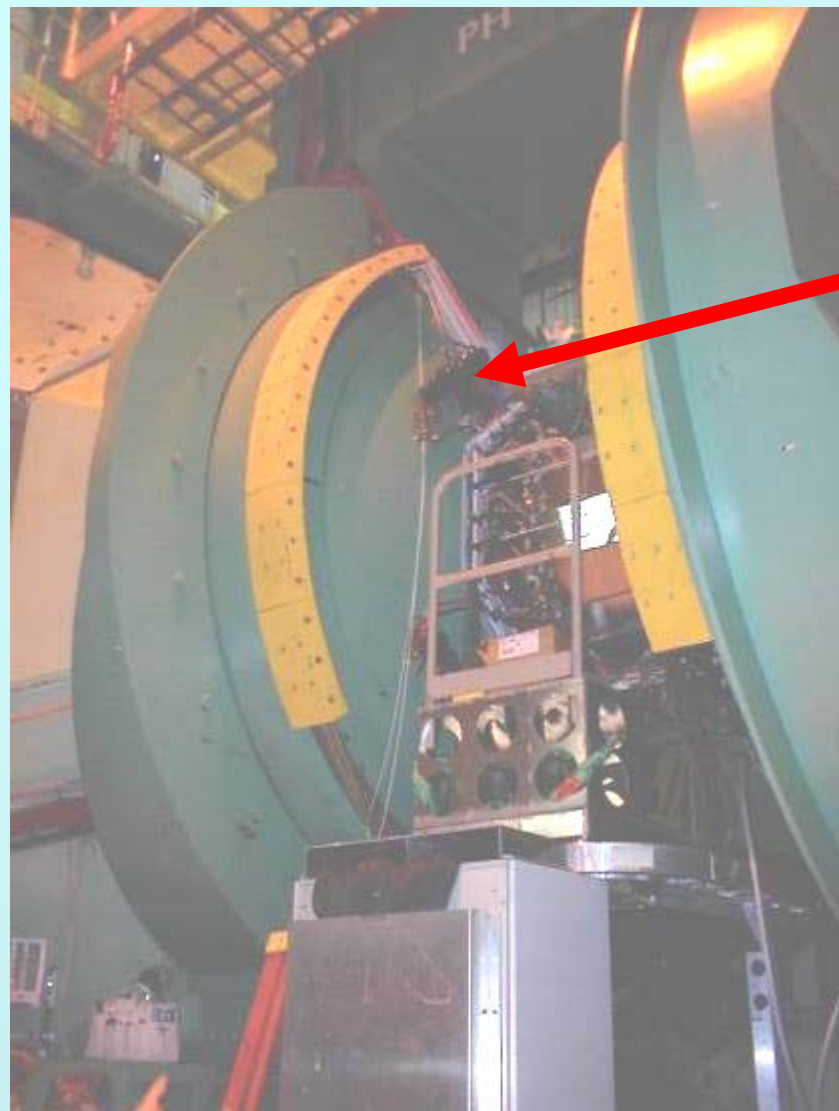
- Calib./testing of SF6 monitors
- Gas system schematic in progress
- Fire protection *piggy backed on 912 alarms. Replace tarps with fire rated hole covers*
- Gas environmental impact *Ralf update review numbers when gas system design is complete*
- Electronics/equipment review
- Factory users safety manual *interim Worker plan complete; final production version needed*

C. Other

Ali needs map showing internet and phone locations.

Need sketch for outside gas bottle lean-to

RXNP Repair



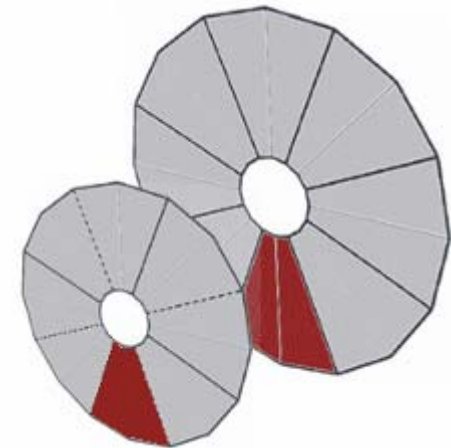
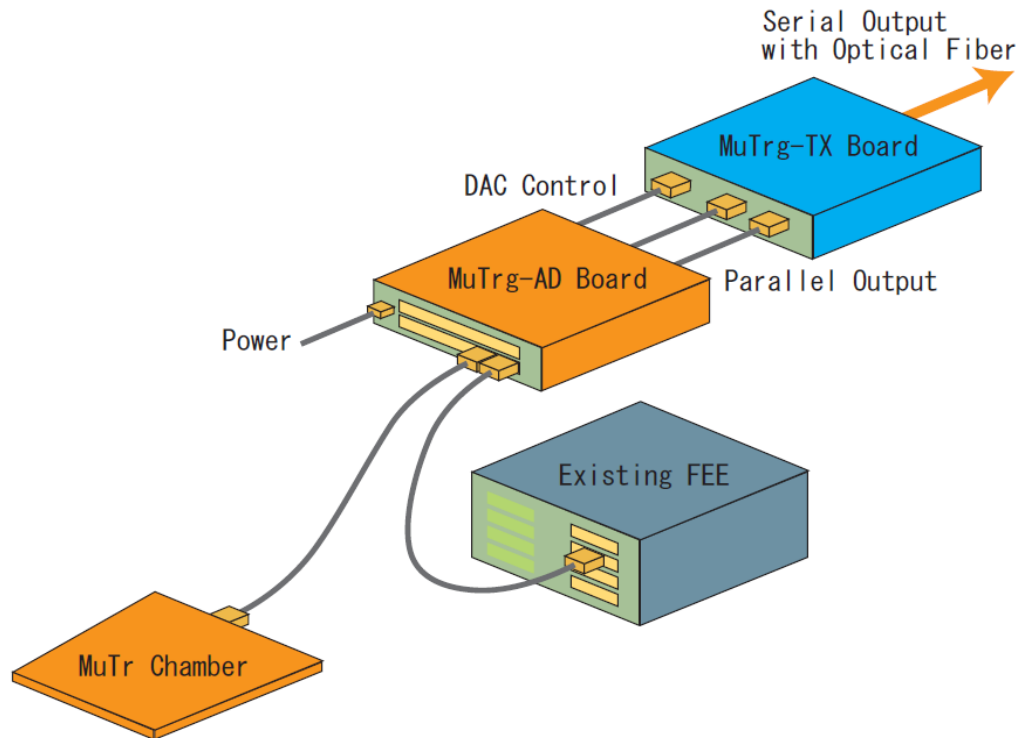
Bum phototube replaced

Technical Support 2007

9/6/2007

Weekly Planning Meeting

MuTr FEE Upgrade Prototype



- Last week
 - Cooling water and dry air in station 2 (Thu)
 - Flammable gas safety permission in progress (Thu)
 - Isobutane start flowing (Thu)
 - 24h shift started from Thursday.
 - DAQ studies (Thu-Sat)

North Arm, Station 2

- Station 2, bottom octant, middle gap, non-stereo plane
- 5 AD boards & 5 TX boards
- Cooling water & Dry air (Thu)



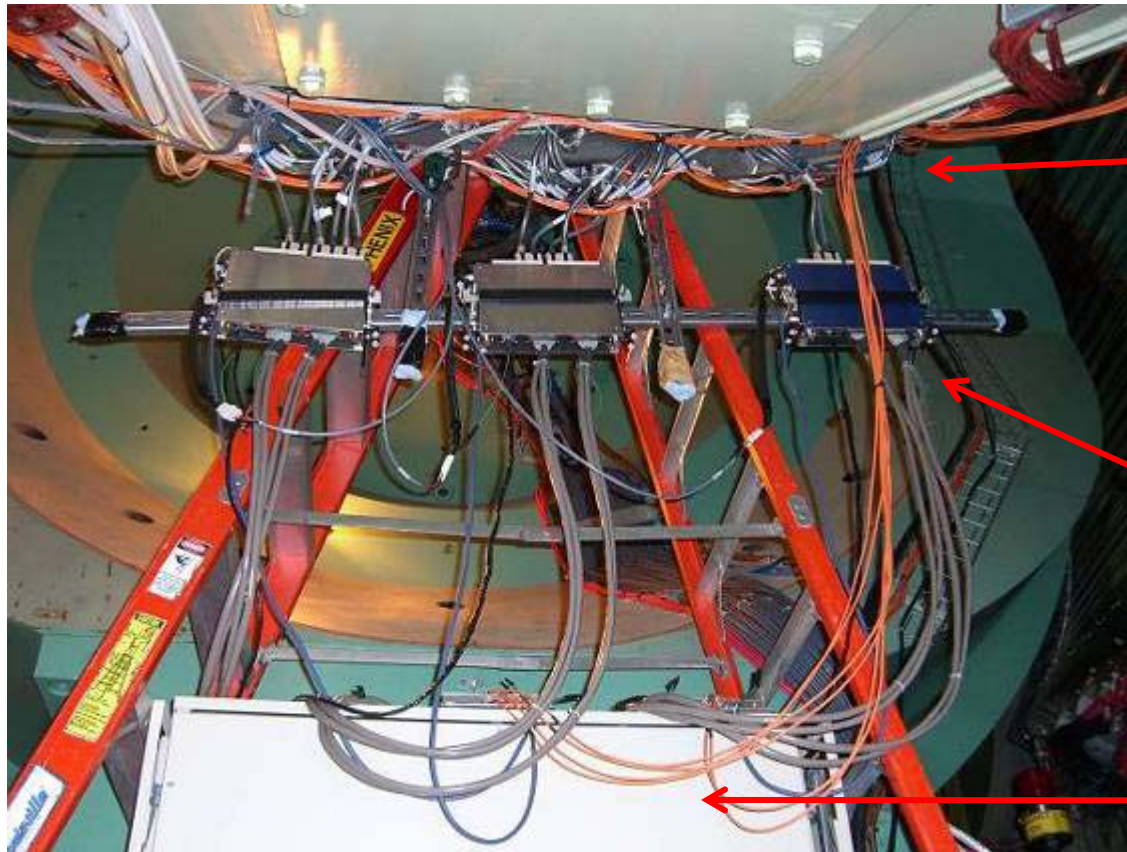
← MuTr Chamber

← AD boards

← TX boards

North Arm, Station 1

- Installation to station 1, bottom octant, middle gap, non-stereo plane completed
- 3 AD boards & 3 TX boards



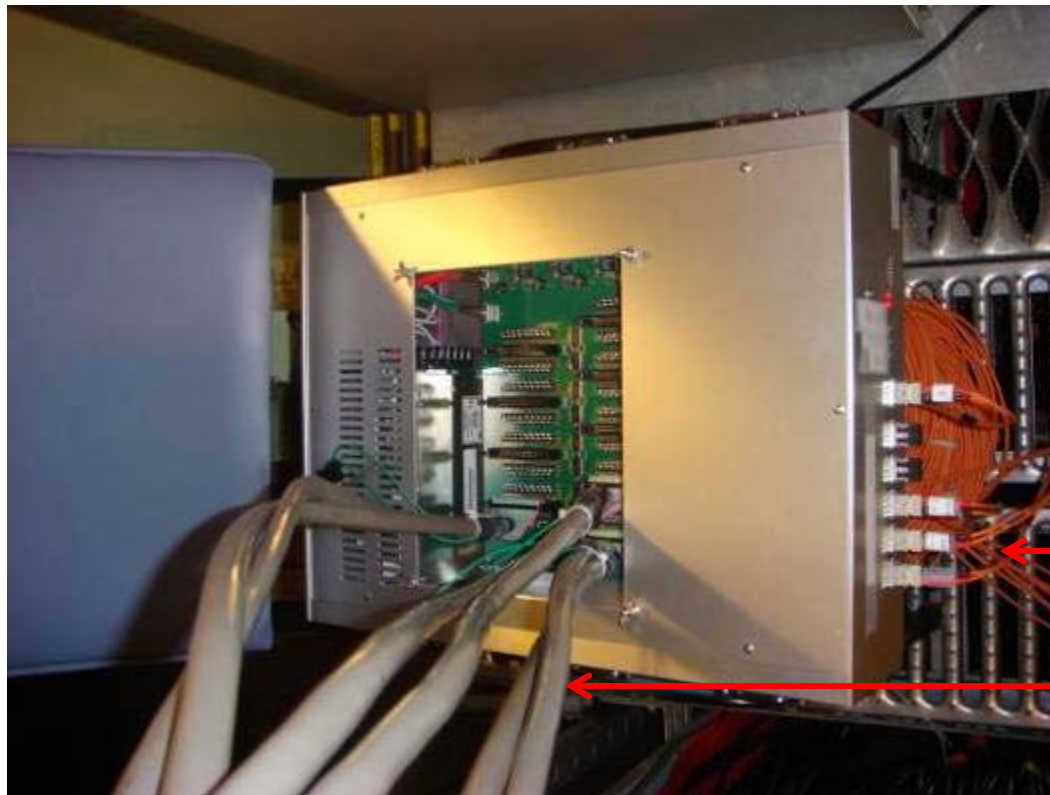
MuTr Chamber

AD boards

TX boards

Merger board (MRG)

- Two MRG boards were installed near the MuID ROC north

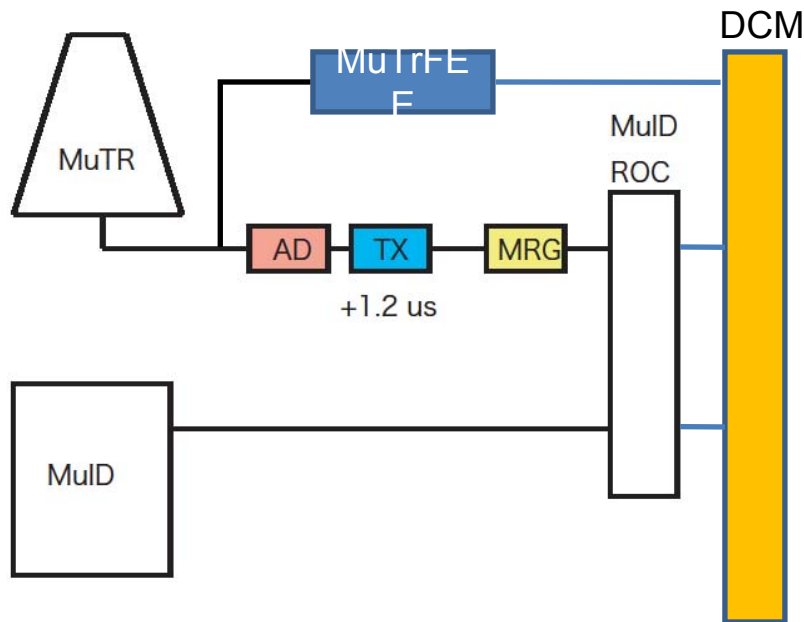


← CLK in

← TX outputs x 3

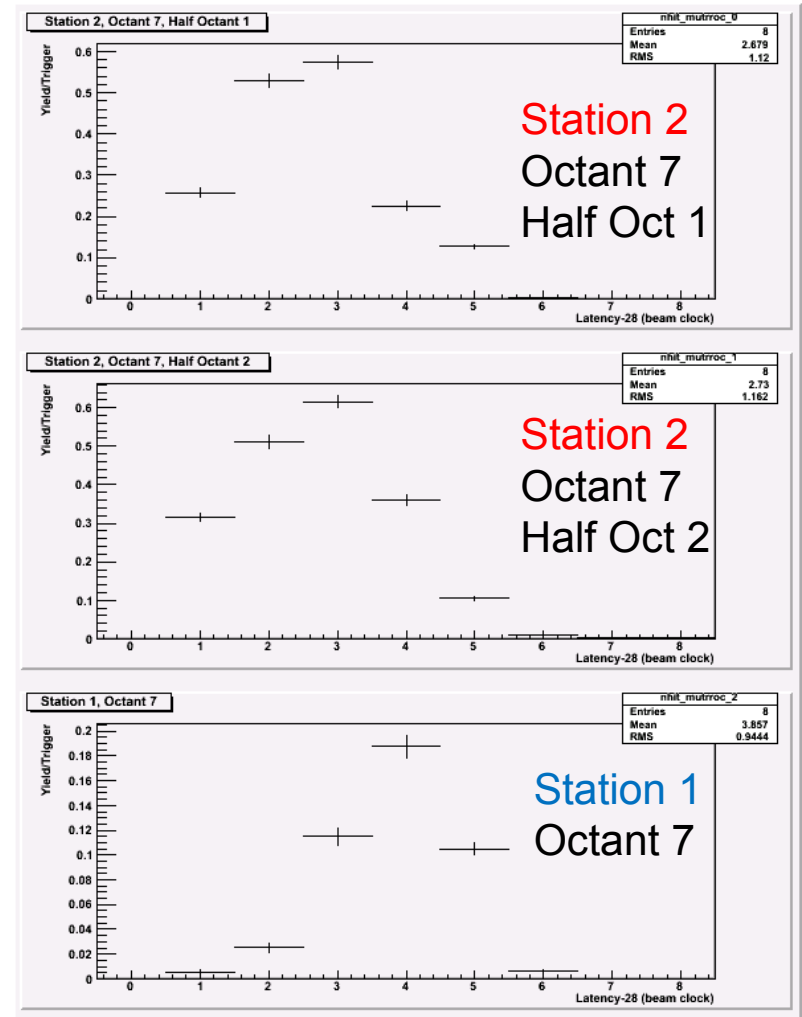
← Outputs to MuID ROC

Cosmic data, first shot



- Cosmic ray data
 - Trigger : MuID LL1 + MuID BLT
 - Rate : ~650 Hz
- Digitized data from MuTr were successfully recorded.
- Time structure of the MuTr signal is being studied by scanning Level 1 latency.

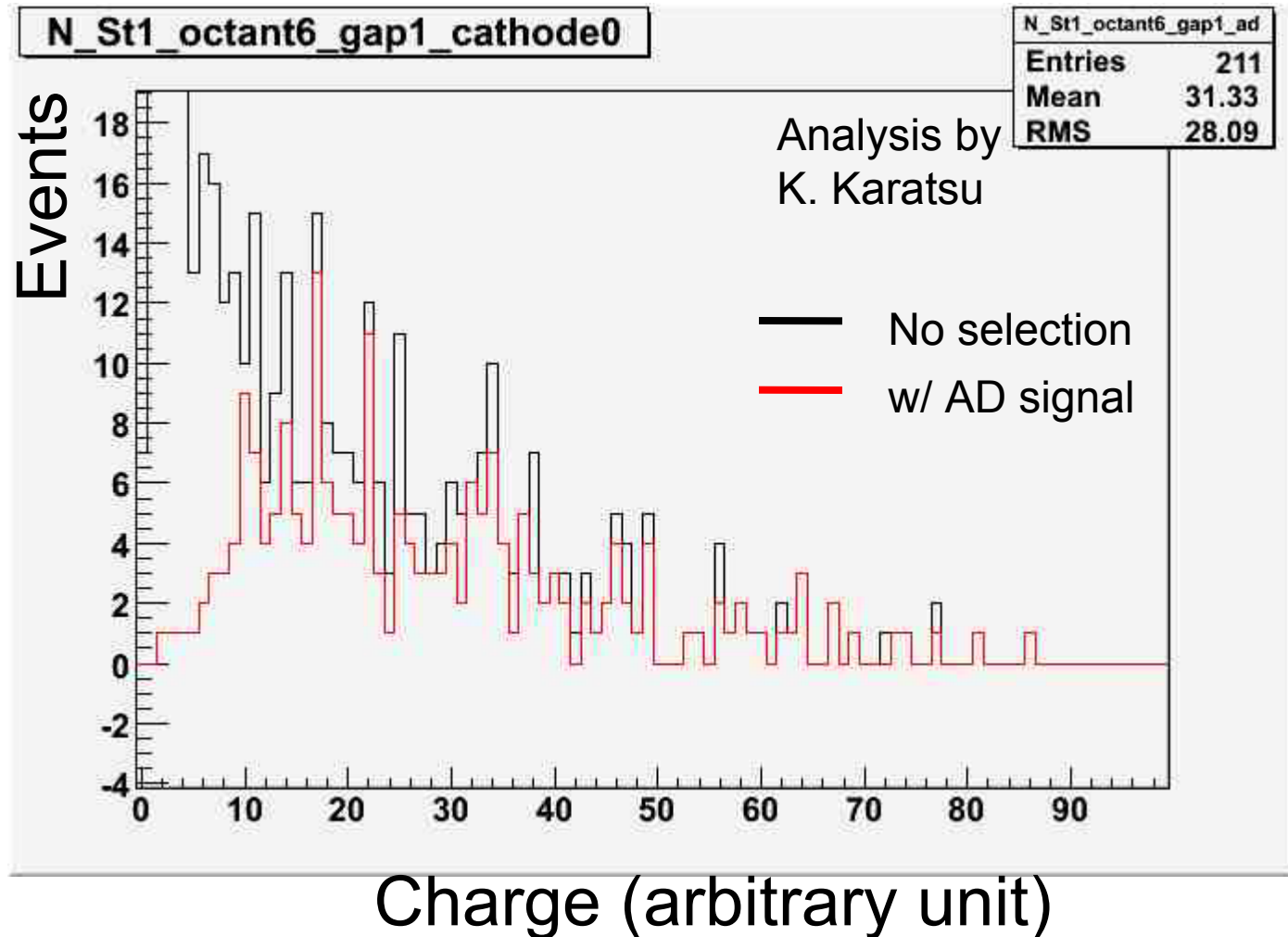
$N(\text{MuTr})/\text{Trigger}$



LV1 Latency-28 (Beam clock)

MuTr FEE analog signal

- 20000 events (~1% of run) at optimal latency



Schedules

- Total 150 M triggers were accumulated
 - ~250k cosmic events/octant
 - Goal : 600 k cosmic events/octant
 - Evaluation of efficiency, position resolution, time resolution
 - Stat. uncertainty $< \sim 3\%$
- Run plans
 - Accumulation of cosmic data till Sep. 12 morning
 - End station 1 data taking after Sep. 10 (to accommodate de-capacitor work by LANL group)
 - Uninstallation : Sep 12-14.

Required resources

- Gas
 - CF₄ (MuTr)
 - Isobutan (MuID)
- Cooling water and dry air
 - station 2
- Electricities
 - HV (MuID, MuTr, RxNP)
 - LV (MuID, MuTr, RxNP)
- DAQ
 - Standalone calibration
 - Big partition
 - MuTr + MuID + (RxNP)
 - Disk space
 - Buffer box 6
 - Need to change before weekend
- Computing resources
 - VA machines (va061-69)
 - Data transfer to HPSS and CCJ

Mu Trigger Station 1 and 2 Upgrades

10:00 - 11:00 AM

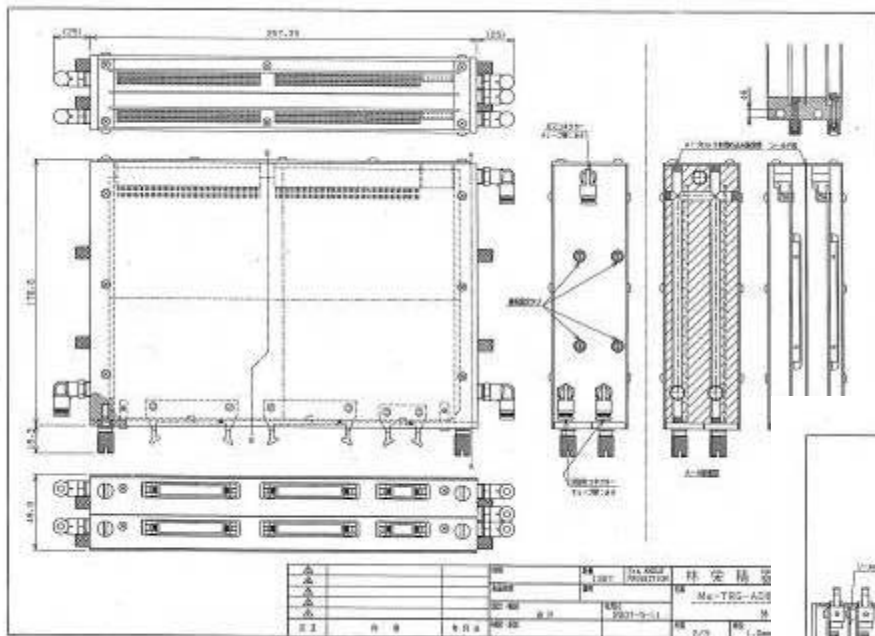


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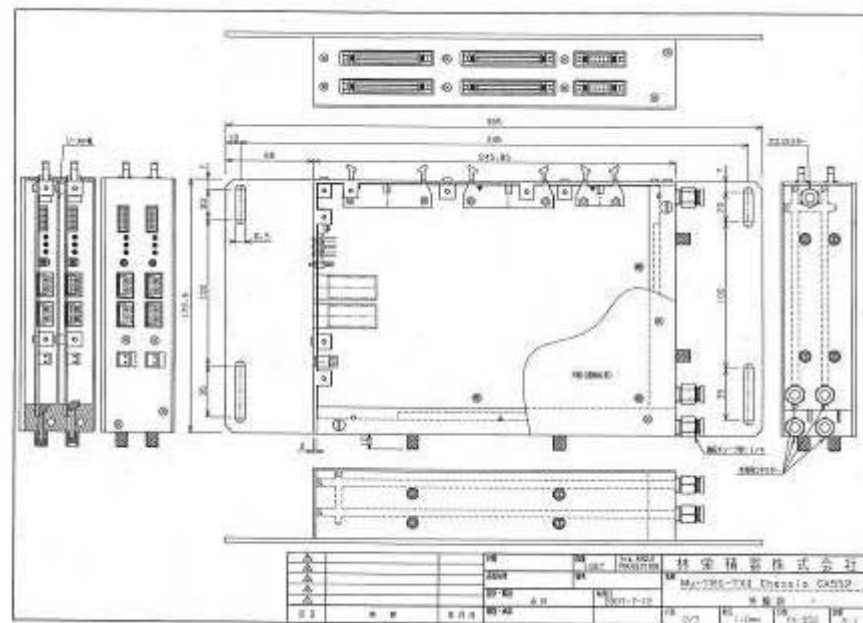
Weekly Planning Meeting

Mu Trigger Station 1 and 2 Upgrades

TECH-AD-SUPPOT+NOO7



We plan to make a couple of mockups of the AD and TX boxes to test fit in potential station 1 locations





- Empty (except clean metal waste) and discard old container
- NCC prototype & electronics Mike L. & Richie
- VTX prototype aluminum support strips needed for flimsy plexi test box - Done

- Neutron shielding test (4' x 4' x 2" borated polyethylene)

Shield support design in progress
Install in September for Run 8 tests



Safety/Security Notes:

PHENIX Lab Director Directive on "PPE":

wearing non-complying attire (such as shorts, short sleeve shirts, and other garments that leave arms and legs exposed) in the laboratory, shop, and industrial work areas of the Laboratory. : "I am directing that this practice be discontinued immediately and the requirements of SBMS be enforced by all levels of supervision. This is applicable to all BNL people - employees, guests, contractors, students, etc - all who work or visit such areas."

C-A has interpreted this to mean long pants and long sleeve shirts everywhere but offices and lunchrooms. 912 tent work must comply.

PHENIX interpretation: IR and AH require long sleeves and long pants. Elsewhere at 1008 is office space.

A Significance Category (SC) 3 occurrence was declared today (09/05/07) at 10:15 AM as a result of the following event:

On Thursday, August 30, 2007 at approximately 6:00 P.M., a biologist was working in a bacteriology hood in Bldg 463, Rm. B-134-C. While using a bunsen burner to facilitate transfer of cells to media, the wrist portion of the biologist disposable labcoat came into contact with the burner flame and ignited. The flame on the labcoat was immediately extinguished and the labcoat removed before any melting material came in contact with skin. There was no injury to the biologist.



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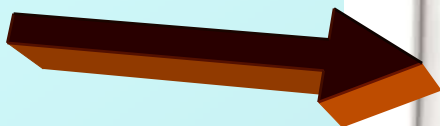
Weekly Planning Meeting

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|------|--|
| 2007 | HBD Repairs, DC (minor) repairs), MPC N&S upgrade, MuTr FEE upgrade prototype, infrastructure upgrades & repairs, misc. subsystem work |
| 2008 | MuTr FEE upgrades 1 octant 1&2 S, Cu absorber test, RPC3 S, infrastructure upgrades & repairs, misc. subsystem work |
| 2009 | Scaffolding in MMS and MMN, MuTr FEE N&S stn. 2 & 3, MuTr N&S stn. 2 & 3 repairs, RPC2 S&N, RPC3 N, Cu absorbers, infrastructure upgrades & repairs, misc. subsystem work |
| 2010 | Remove HBD & RXNP, remove beampipe, DC West upgrade, VTX barrel, RPC1 N&S, MuTr FEE stn. 1 N&S, MuTr stn. 1 N&S repairs, infrastructure upgrades & repairs, misc. subsystem work |
| 2011 | NCC S, FVTX, infrastructure upgrades & repairs, misc. subsystem work |
| 2012 | NCC N, upgrades contingency & wishlist, infrastructure upgrades & repairs, misc. subsystem work |

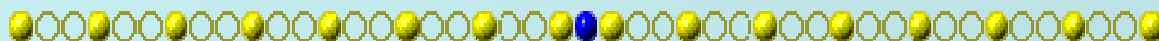
** Years refer to the shutdown year and follow the run with the similar number (i.e. work in 2007 is to be done in the shutdown that follows run 7, and so on)*

Where To Find PHENIX Technical Info

A Belated
sentiment



Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm